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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,508	08/11/2000	Markku Vehvilainen	915-374	7877

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EXAMINER	
LEE, Y YOUNG	

ART UNIT	PAPER NUMBER
2613	12

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/637,508	VEHVILAINEN, MARKKU	
	Examiner	Art Unit	
	Y. Lee	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasue et al (EP 0 944 261) in view of Yamakage et al (5,872,597).

Yasue et al, in Figures 1-3 and 8-13, discloses a video signal processing apparatus that is substantially the same method and arrangement for reducing the volume or rate of an encoded digital video bitstream that comprises both independently encoded pictures I and pictures encoded using prediction from other pictures (P and B) as specified in claims 1-21 of the present invention, characterized in that the arrangement comprises means for partly decoding 802 independently encoded pictures I and pictures encoded using prediction from other pictures (P and B) from the encoded digital video bitstream, means for reducing (801-810) the amount of bits in partly decoded data from independently encoded pictures and partly decoded data form pictures encoded using prediction from other pictures; means for re-encoding 809 the partly decoded data from independently encoded pictures and partly decoded data from

pictures encoded using prediction from other pictures in which the amount of bits is reduced; a variable length decoder 802 for decoding the variable length coding of the variable length encoded, weighted and quantized DCT coefficient matrices; a low pass filter 805 with multitude of different filtering functions upon different coefficient groups within a single DCT coefficient matrix, wherein each filtering function is dependent on the contents of the DCT coefficient matrix which is filtered to represent the weighted and quantized DCT coefficient matrices; and a requantization block (803, 807, 808) arranged to divide a DCT coefficient matrix by a certain second variable value.

It is noted Yasue et al differs from the present invention in that it fails to disclose any details of a bitstream analyzer. Yamakage et al however, in Figures 5-10, teaches the concept of such well known bitstream analyzer 30 arranged to separate different types of data in the encoded digital video bitstream and a number of variable length encoded, weighted and quantized DCT coefficient matrices from an MPEG-2-encoded digital video bitstream.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Yasue et al and Yamakage et al before him/her, to incorporate the common bitstream analyzer 30 as taught in Yamakage et al before the decoding arrangement in Figure 8 of Yasue et al in order to miniaturize the circuit scale, thereby providing the moving picture signal decoding system capable of operating in higher speed.

4. Claims 1-21 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (EP 0 687 112 A2) in view of Yamakage et al (5,872,597) for the same

reasons as set forth in Section 6 of the last office action, paper number 10, dated 11/10/03.

Takahashi et al, in Figures 2-7, 10-13, and 15-17, discloses an image conversion apparatus that is substantially the same method and arrangement for reducing the volume or rate of an encoded digital video bitstream that comprises both independently encoded pictures I and pictures encoded using prediction from other pictures (P and B) as specified in claims 1-21 of the present invention, characterized in that the arrangement comprises means for partly decoding 201 independently encoded pictures I and pictures encoded using prediction from other pictures (P and B) from the encoded digital video bitstream, means of reducing 202 the amount of bits in partly decoded data from independently encoded pictures I and partly decoded data from pictures encoded using prediction from other pictures (P and B); and means for re-encoding 203 the partly decoded data from independently encoded pictures I and partly decoded data from pictures encoded using prediction from other pictures (P and B) in which the amount of bits is reduced; a variable length decoder 201 for decoding the variable length coding of the variable length encoded, weighted and quantized DCT coefficient matrices 180; a low pass filter (202, 301) with multitude of different filtering functions upon different coefficient groups within a single DCT coefficient matrix, wherein each filtering function (202, 301) is dependent on the contents of the DCT coefficient matrix which is filtered to represent the weighted and quantized DCT coefficient matrices; and a requantization block 140 arranged to divide a DCT coefficient matrix by a certain second variable value.

It is noted Takahashi et al differs from the present invention in that it fails to disclose any details of a bitstream analyzer. Yamakage et al however, in Figures 5-10, teaches the concept of such well known bitstream analyzer 30 arranged to separate different types of data in the encoded digital video bitstream and a number of variable length encoded, weighted and quantized DCT coefficient matrices from an MPEG-2-encoded digital video bitstream.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Takahashi et al and Yamakage et al before him/her, to incorporate the common bitstream analyzer as taught in Yamakage et al before the decoding arrangement in Figure 4 of Takahashi et al in order to miniaturize the circuit scale, thereby providing the moving picture signal decoding system capable of operating in higher speed.

Response to Arguments

5. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 3/12/04 have been fully considered but they are not persuasive.

Applicant asserts on pages 8 and 9 of the Remarks that Yasue et al suggest processing I-pictures only. However, Figures 1-3 and 8 of Yasue et al illustrate various alternative processing arrangements wherein both independently encoded pictures and pictures encoded using prediction from other pictures are processed.

In response to applicant's argument on page 10 of the Remarks that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Figure 5) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant asserts on pages 10 and 11 of the Remarks that Yamakage et al is not related with reducing the volume or rate of encoded video bitstreams. However, column 1 of Yamakage et al explicitly teaches an arrangement for processing MPEG video bitstreams.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584. The examiner can normally be reached on (703) 308-7584.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Y. Lee
Primary Examiner
Art Unit 2613

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